

What Is Claimed Is:

1. A memory card controller, comprising:
 - a memory that stores a file allocation table and file system structures for a memory card to be controlled by the memory card controller; and
 - a processor that manages the file allocation table and file system structures based on requests made by a host device with respect to information to be retrieved from the memory card or with respect to information to be stored on the memory card.
2. The memory card controller according to claim 1, wherein the memory is a random access memory or a storage memory of the memory card.
3. The memory card controller according to claim 2, wherein the random access memory is a random access memory.
4. The memory card controller according to claim 1, wherein the host device is one of a personal digital assistant, a digital camera, and a cellular phone.
5. A method of determining whether a file write request output from a host device for writing a file to a memory card can be accommodated, comprising:

obtaining, by a memory card controller that provides a communications interface between the memory card and the host device, a file allocation table (FAT) and file system structures stored on the memory card;

storing the FAT and file system structures at the memory card controller;

determining, by the memory card controller based on information obtained from the FAT, whether the memory card has sufficient available storage space to fulfill the file write request made by the host device; and

informing the host device as to whether or not the file write request can be fulfilled.

6. The method according to claim 5, wherein the storing step is performed by storing the FAT and file system structures onto a random access memory of the memory card controller.

7. The method according to claim 6, wherein the random access memory is a random access memory or a storage memory of the memory card.

8. The method according to claim 5, wherein the host device is one of a personal digital assistant, a digital camera, a digital music player, a video camera, and a cellular phone.

9. A method of determining whether a file read request output from a host device for reading a file from a memory card can be accommodated, comprising:

obtaining, by the host device, information regarding names of files stored on the memory card;

outputting, by the host device, the memory read request to read a particular one of the files stored on the memory card;

obtaining, by a memory card controller that provides a communications interface between the memory card and the host device, a file allocation table (FAT) and file system structures stored on the memory card to determine storage locations on the memory card whereby the particular one of the files is stored;

storing the FAT and file system structures on the memory card controller; and

providing the particular one of the files to the host device from the memory card to the host device, under control of the memory card controller.

10. The method according to claim 9, wherein the storing step is performed by storing the FAT and file system structures onto a random access memory of the memory card controller.

11. The method according to claim 10, wherein the random access memory is a random access memory or a storage memory of the memory card.

12. The method according to claim 9, wherein the host device is one of a personal digital assistant, a digital camera, and a cellular phone.

13. The method according to claim 9, wherein the providing step comprises the following substeps:

informing the host device as to all storage locations on the memory card that the one of the particular one of the files is stored; and

providing commands, by the host device to the memory card controller, to obtain contiguous storage locations of the memory card; and obtaining the contiguous storage locations from the memory card to the host device under control of the memory card controller.

14. A method of determining whether a file copy request from a host device for copy a file from a memory card can be accommodated, comprising:

obtaining, by the host device, information regarding names of file to be copied on the memory card;

determining where within a file allocation table (FAT) on the memory card controller the file to be copied is located and assessing how much space the file occupies;

determining, by a memory card controller based on information obtained from the FAT, whether the memory card has sufficient available storage space to fulfill the file copy request made by the host device;

informing the host device as to whether or not the file copy request can be fulfilled; and

copying, under control of the memory card controller, the file to a new location and updating the FAT and file system structures to record the location of the copied file.

15. A method of determining whether a file move request from a host device for copy a file from a memory card can be accommodated, comprising:
- obtaining, by the host device, information regarding names of file to be moved on the memory card and the directory location;
 - determining where within a file allocation table (FAT) on the memory card controller the file to be moved is located;
 - moving, under control of a memory card controller, the file to a new location and updating the FAT, FDC Descriptor and Root directory to record the location of the moved file.

16. A method of determining whether a file delete request from a host device for deleting a file from a memory card can be accommodated, comprising:
- obtaining, by the host device, information regarding names of files to be deleted on the memory card;
 - determining where within a file allocation table (FAT) on a memory card controller the file to be deleted is located; and
 - updating, under control of the memory card controller, the FAT and file system structures to remove the requested file.